



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
25063 CENTER RIDGE ROAD
WESTLAKE, OH 44145-4114

March 2, 2017

MEMORANDUM

SUBJECT: Clean Air Act Monitoring, American Electric Power, Cheshire, Ohio

FROM: Katharina Bellairs, Environmental Engineer (ME-W) *KB*

THRU: Mark Conti, Lead Environmental Engineer (ME-W) *MCC*

TO: Air Enforcement and Compliance Assurance Branch, IL/IN Section (AE-18J)
Nathan Frank, Section Chief

On August 1, 2016, I performed off-site visible emission readings under the Clean Air Act at American Electric Power, Gavin Station, Cheshire, Ohio, at Ethan Chatfield's request. My findings are attached.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
25063 CENTER RIDGE ROAD
WESTLAKE, OHIO 44145**

DATE: March 2, 2017

SUBJECT: CLEAN AIR ACT OFF-SITE MONITORING EVALUTION REPORT
American Electric Power – Gavin Generating Station

FROM: Katharina Bellairs, Environmental Engineer
OECA – Cleveland Office

THRU: Mark Conti, Lead Environmental Engineer
OECA – Cleveland Office

TO: Nathan Frank, Section Chief
Air & Radiation Division, AECAB (IL/IN)

BASIC INFORMATION

Facility Name: American Electric Power – Gavin Generating Station

Facility Location: 7397 Ohio Seven, Cheshire, Ohio 45620

Date of Inspection: August 1, 2016

Lead Monitor: Katharina Bellairs, Environmental Engineer

Purpose of Monitoring Evaluation: Perform Method 9 and Alternative Method 082 Opacity Readings

Facility Type: Electric Generating Station

Arrival Time: approximately 2:00 p.m. EST

Departure Time: approximately 3:00 p.m. EST

MONITORING INFORMATION

Field Measurements: were taken during this inspection.

I arrived in Cheshire, Ohio, and stopped south of the intersection of Gravel Hill Rd and Turkey Hill Road. I performed Method 9 visible emissions readings from 2:18 to 2:38 p.m. EST and Method 082 alternative visible emission readings with Virtual Technology's opacity camera from 2:04 p.m. EST to 2:39 p.m. EST. My reading location was at 38.938451, -82.131927.

SIGNATURES

Lead Monitor: _____

Date: _____

3/2/17

Lead Environmental Engineer: _____

Mark Conti

Date: _____

3-2-2017

APPENDICES AND ATTACHMENTS

Method 9 Visible Opacity Reading Report

VISIBLE EMISSION OBSERVATION FORM

Method Used Method 9		
Equipment Owner N/A		
Facility Name AEP Gavin Power Plant		
EO Street Address 7397 OH-7		
EO City Cheshire	EO State OH	EO Zip 45620

Process N/A	Unit N/A	Operating Mode N/A
Control Equipment N/A	Operating Mode N/A	

Describe Emission Point brownish gray/white smoke from left stack			
Height of Emiss. Pt. Start 1319.97 End Same		Height of Emiss. Pt. Rel. to Observer Start 1315.97 End Same	
Distance to Emiss. Pt. Start 4803.33 End Same		Direction to Emiss. Pt. (Degrees) Start 111.1 End Same	

Vertical Angle to Obs. Pt. Start 14.25 End Same		Direction to Obs. Pt. Start 111.49 End Same	
Distance and Direction to Observation Point from Emission Point Start 381.28 / 116.54 End Same			

Describe Emissions brownish gray/white smoke			
Start from left stack lofting		End Same	
Emission Color Start gray End gray		Water Droplet Plume Attached: (X) Detached: () N/A: ()	

Describe Plume Background Start Gray and white clouds End Same			
Background Color Start End		Sky Conditions Start Overcast End Same	
Wind Speed Start 2 End Same		Wind Direction Start 270 End Same	
Ambient Temp. Start 91 End Same	Wet Bulb Temp. Start 69 End Same	RH Percent Start 55 End Same	



Longitude 082.07.54.937 W	Latitude 38.56.18.424 N	Declination
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Notes

Form Number	Page	Of
Continued on VEO Form Number		

Observation Date 8/1/2016	Time Zone EST	Start Time 14:18:46	End Time 14:38:34
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	Opacity	Comments
1	25	
2	25	
3	25	Avg. Opacity = 31
4	30	
5	35	
6	30	
7	40	
8	25	
9	30	
10	30	
11	30	
12	15	
13	20	
14	15	
15	N/A	
16	30	
17	20	
18	25	
19	35	
20	35	
21	25	
22	20	
23	25	
24	25	
25	30	
26	35	
27	20	
28	25	
29	30	
30	20	
31	25	
32	35	

Observers Name (Print) Katharina Bellairs	
Observers Signature Katharina Bellairs	Date 8/1/2016
Organization USEPA Region 5	
Certified By Opacitair Inc	Date 4/13/2016

	Opacity		Opacity		Opacity		Opacity		Opacity
33	30	34	30	35	30	36	30	37	N/A
38	N/A	39	N/A	40	N/A	41	N/A	42	N/A
43	N/A	44	N/A	45	N/A	46	N/A	47	N/A
48	N/A	49	N/A	50	40	51	35	52	30
53	35	54	40	55	30	56	30	57	35
58	35	59	30	60	30	61	20	62	30
63	25	64	30	65	30	66	35	67	35
68	35	69	30	70	25	71	30	72	30
73	30	74	35	75	30	76	35	77	35
78	20	79	15	80	25	81		82	
83		84		85		86		87	
88		89		90		91		92	
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213		214		215		216		217	
218		219		220		221		222	
223		224		225		226		227	
228		229		230		231		232	
233		234		235		236		237	
238		239		240		241		242	
243		244		245		246		247	
248		249		250		251		252	
253		254		255		256		257	
258		259		260		261		262	

Source

Name: AEP Gavin Power Plant
Address: 7397 OH-7
City: Cheshire
State: OH
Zip: 45620
Phone:
Local ID:

Regulatory

Permit ID:
Condition:
Regulatory Reference:

Process

Process: N/A
Unit: N/A
Operating Mode: N/A

Complaint

Name:
Address:
City:
State: NA
Zip:

Equipment

Name: N/A

Type of Inspection

Type of Inspection: Surveillance

Sun

Altitude: 63.2
Azimuth: 241.4
Data Source: Manual

Map Information

Map Type: USGSDRG
Map Width: 5000

Analysis

Averaging Type: Manual
Method: Method 9
Number of Images: 24
Rolling High Count: 24
Seconds Between Images: 15
Who Created: DOCS II
Creation Date: 9/22/2011

Analyst Name: Katharina Bellairs
Affiliation: USEPA Region 5
Comments: